## **ABSTRACT**

A memory device includes multiple fins formed adjacent to one another, a source region, a drain region, a gate, a wordline, and a bitline contact. At least one of the multiple fins is doped with a first type of impurities and at least one other one of the fins is doped with a second type of impurities. The source region is formed at one end of each of the fins and the drain region is formed at an opposite end of each of the fins. The gate is formed over two of the multiple fins, the wordline is formed over each of the multiple fins, and a bitline contact is formed adjacent at least one of the multiple fins.